



Agency for Healthcare Research and Quality
Advancing Excellence in Health Care



NATIONAL
GUIDELINE
CLEARINGHOUSE

General

Guideline Title

Complications of ERCP.

Bibliographic Source(s)

ASGE Standards of Practice Committee, Anderson MA, Fisher L, Jain R, Evans JA, Appalaneni V, Ben-Menachem T, Cash BD, Decker GA, Early DS, Fanelli RD, Fisher DA, Fukami N, Hwang JH, Ikenberry SO, Jue TL, Khan KM, Krinsky ML, Malpas PM, Maple JT, Sharaf RN, Shergill AK, Dominitz JA. Complications of ERCP. *Gastrointest Endosc*. 2012 Mar;75(3):467-73. [92 references] [PubMed](#)

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Mallery JS, Baron TH, Dominitz JA, et al. Complications of ERCP. *Gastrointest Endosc* 2003;57:633-8.

Recommendations

Major Recommendations

Complications are inherent in the performance of endoscopic procedures and more so for endoscopic retrograde cholangiopancreatography (ERCP). Knowledge of potential ERCP complications, their expected frequency, and the risk factors for their occurrence may help to recognize and to minimize the incidence and severity of complications. Endoscopists are expected to carefully select patients for the appropriate intervention, be familiar with the planned procedure and available technology, and be prepared to manage any adverse events that may arise. Once a complication occurs, early recognition and prompt intervention may minimize the morbidity and mortality associated with that complication. Review of complications as part of a continuing quality improvement process may serve to educate endoscopists, help to reduce the risk of future complications, and improve the overall quality of ERCP.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Endoscopic retrograde cholangiopancreatography (ERCP) related complications

Note: The diagnosis and management of all complications of ERCP are beyond the scope of this document; however, general principles are discussed.

Guideline Category

Management

Prevention

Risk Assessment

Clinical Specialty

Gastroenterology

Internal Medicine

Intended Users

Allied Health Personnel

Nurses

Physicians

Guideline Objective(s)

- To provide information that may assist endoscopists in providing care to patients undergoing endoscopic retrograde cholangiopancreatography (ERCP) and increase knowledge of potential complications.
- To update the 2003 American Society of Gastrointestinal Endoscopy (ASGE) guideline on complications of ERCP

Target Population

Patients undergoing endoscopic retrograde cholangiopancreatography (ERCP)

Interventions and Practices Considered

1. Endoscopists are expected to:
 - Select patients carefully
 - Be aware of potential endoscopic retrograde cholangiopancreatography (ERCP) complications, their expected frequency, and the risk factors associated with their occurrence
 - Be familiar with the planned procedure and available technology
 - Be prepared to manage any adverse events
2. Early recognition and prompt intervention of complications
3. Review of complications to reduce future risk and improve overall quality

Major Outcomes Considered

- Pancreatitis

- Hemorrhage
- Perforation
- Infection
- Cardiopulmonary complications
- Mortality
- Other miscellaneous endoscopic retrograde cholangiopancreatography (ERCP) complications

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

The Standards of Practice Committee of the American Society for Gastrointestinal Endoscopy performed a search of the medical literature using PubMed (1990-2011). Additional references were obtained from the bibliographies of the identified articles and from recommendations of expert consultants. When limited or no data exist from well-designed prospective trials, emphasis is given to results from large series and reports from recognized experts.

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Expert Consensus

Rating Scheme for the Strength of the Evidence

Not applicable

Methods Used to Analyze the Evidence

Systematic Review

Description of the Methods Used to Analyze the Evidence

Not stated

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

- The committee meets formally twice a year (Spring and Fall) and edit/complete documents by consensus. The time from completion and publication is typically less than 6 weeks and data is updated until completion of the article based on emerging evidence.
- Position statements are based on a critical review of the available data and expert consensus at the time the documents are drafted.

Rating Scheme for the Strength of the Recommendations

Not applicable

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

Internal Peer Review

Description of Method of Guideline Validation

This document was reviewed and approved by the Governing Board of the American Society for Gastrointestinal Endoscopy.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of evidence supporting the recommendations is not specifically stated.

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Knowledge of potential endoscopic retrograde cholangiopancreatography (ERCP) complications, their expected frequency, and the risk factors for their occurrence may help to recognize and to minimize the incidence and severity of complications.

Potential Harms

Not stated

Qualifying Statements

Qualifying Statements

- Position statements are based on a critical review of the available data and expert consensus at the time that the document was drafted. Further controlled clinical studies may be needed to clarify aspects of this document, which may be revised as necessary to account for changes in technology, new data, or other aspects of clinical practice.

- This document is intended to be an educational device to provide information that may assist endoscopists in providing care to patients. This position statement is not a rule and should not be construed as establishing a legal standard of care or as encouraging, advocating, requiring, or discouraging any particular treatment. Clinical decisions in any particular case involve a complex analysis of the patient's condition and available courses of action. Therefore, clinical considerations may lead an endoscopist to take a course of action that varies from this position statement.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

Staying Healthy

IOM Domain

Effectiveness

Safety

Identifying Information and Availability

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Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2003 (revised 2012 Mar)

Guideline Developer(s)

Source(s) of Funding

American Society for Gastrointestinal Endoscopy

Guideline Committee

Standards of Practice Committee of the American Society of Gastrointestinal Endoscopy

Composition of Group That Authored the Guideline

Committee Members: Michelle A. Anderson, MD; Laurel Fisher, MD; Rajeev Jain, MD; John A. Evans, MD; Vasundhara Appalaneni, MD; Tamir Ben-Menachem, MD; Brooks D. Cash, MD; G. Anton Decker, MD; Dayna S. Early, MD; Robert D. Fanelli, MD (*SAGES Representative*); Deborah A. Fisher, MD, MHS; Norio Fukami, MD; Joo Ha Hwang, MD; Steven O. Ikenberry, MD; Terry L. Jue, MD; Khalid M. Khan, MD (*NASPGAN Representative*); Mary Lee Krinsky, DO; Phyllis M. Malpas, RN, CGRN (*SGNA Representative*); John T. Maple, DO; Ravi N. Sharaf, MD; Amandeep K. Shergill, MD; Jason A. Dominitz, MD, MHS (*Chair*)

Financial Disclosures/Conflicts of Interest

The following authors disclosed financial relationships relevant to this publication: Dr Evans: consultant to Cook Medical; Dr Decker: consultant to Facet Biotechnology. All other authors disclosed no financial relationships relevant to this publication.

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This is the current release of the guideline.

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Guideline Availability

Electronic copies: Available from the [American Society for Gastrointestinal Endoscopy Web site](#) .

Print copies: Available from the American Society for Gastrointestinal Endoscopy, 1520 Kensington Road, Suite 202, Oak Brook, IL 60523

Availability of Companion Documents

None available

Patient Resources

None available

NGC Status

This NGC summary was completed by ECRI Institute on August 20, 2012.

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